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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/797,835 | 03/09/2004 | Liew C. Chiu | 29-6 US CIP1 CON (78348 C) | 6024 |
| 27975 | 7590 | 01/25/2005 | EXAMINER KIM, RICHARD H | |
| ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791 | | | ART UNIT 2871 | |

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,835

Applicant(s)

CHIU ET AL.

Examiner

Richard H Kim

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-37 and 55-62 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 24-37 and 55-62 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 24-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6, 8-10 of U.S. Patent No. 6,832,856 B2.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the broader claim 24 is anticipated by the more specific claim 1 of U.S. Patent No. 6,832,856 B2, and therefore is obvious.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 55-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaio et al. (US 5,901,263).

Referring to claim 55, Gaio et al. discloses means for converting optical signals into electrical signals (see col. 3, lines 1-3); and means for disengaging the fiber optic module from a cage assembly by rotating a lever actuator (see col. 3, lines 35-41).

Referring to claim 56, Gaio et al. discloses means for withdrawing the fiber optic module by pulling on the lever-actuator (see Fig. 2, ref. 102')

Referring to claim 57, Gaio et al. discloses means for disengaging also providing means for withdrawing (see col. 3, lines 46-48).

Referring to claim 58, Gaio et al. discloses means for pivotally disengaging the fiber optic module from a cage assembly when the lever-actuator is rotated (see col. 3, lines 35-41).

Referring to claim 59, Gaio et al. discloses means for coupling the disengaging means to the fiber optic module (see Fig. 2, ref. 108).

Referring to claim 60, Gaio et al. discloses means for indicating the fiber optic module which the disengaging means releases (see col. 3, lines 39-41).

Referring to claim 61, Gaio et al. discloses a method comprising rotating a lever-actuator to disengage a fiber optic module from a cage assembly (see Fig. 1, ref. 102); and pulling on the lever-actuator to withdraw the fiber optic module from the cage assembly (see col. 3, lines 47-49).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24, 28, 29, 33-37 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaio et al. (US 5,901,263).

Referring to claim 24, Gaio et al. discloses a fiber optic module comprising a nose receptacle including a first fiber optical cable receptacle to receive one or more fiber optic cable plugs (see col. 2, lines 47-50; Fig. 1, ref. 10), a lever-actuator to release the fiber optic module from a cage assembly using a rotational action (see col. 3, lines 35-42; Fig. 2, ref. 102; Fig. 5, ref. 130); a second actuator coupled to the pull-actuator (see Fig. 2, ref. 104), the second actuator to release a clip from a latch (see Fig. 2, ref. 104'; col. 3, lines 53-55) to release the fiber optic module in response to a rotational action on the lever-actuator (see col. 3, lines 35-42); and a printed circuit board including one or more electro-optic transducers to convert optical signals into electrical signals or electrical signals into optical signals (see Fig. 1, ref. 8; col. 3, lines 1-3). However, the reference does not disclose a keeper.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a keeper in place of the clip disclosed in Gaio et al., since both devices are functional to provide a latching means between the cage assembly and the module. Moreover, neither one nor the other provides a clear added advantage, function or purpose over the other, and therefore would be a functionally equivalent modification.

Referring to claims 28 and 29, Gaio et al. discloses the device previously recited. However, the reference does not disclose that the lever-actuator includes one or more pins to rotationally engage the nose receptacle and one or more holes to rotationally engage the nose receptacle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the lever-actuator to include one or more pins to rotationally engage the nose receptacle and one or more holes to rotationally engage the nose receptacle, since such a modification does not provide an added advantage to the pivoting mechanism disclosed in Gaio et al. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally as well with the pivoting pin with holes or with any other mechanism of pivoting in order to provide a pivot point for the bail latch and to hold the bail latch coupled to the nose receptacle. Therefore such a modification is functionally equivalent.

Referring to claim 33, Gaio et al. discloses an orientation indicator to indicate the fiber optic module which the lever-actuator releases (see Fig. 1, ref. 102).

Referring to claims 34 and 37, Gaio et al. discloses a lever-actuator including a pull-arm, wherein the pull-arm is a tab (see col. 3, lines 47-50).

Referring to claims 35 and 36, Gaio et al. discloses the device previously recited. However, the reference does not disclose that the pull-arm is a semi-circular ring or a rectangular ring.

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the pull-arm to be a semi-circular ring or a rectangular ring since such a modification provides no added advantage, function or purpose to the device. Whether the pull-arm is a tab, semi-circular ring or a rectangular ring, either design provides a means for pulling, and therefore is functionally equivalent.

Referring to claim 62, Gaio et al. discloses the method previously recited. However, the reference does not disclose releasing the lever-actuator if the fiber optic module has been release from the cage assembly.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to release the lever-actuator if the fiber optic module has been release from the cage assembly since the lever-actuator would not longer be needed until latching to the cage assembly. Therefore, releasing all unnecessary parts when de-latched would simplify the device.

3. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaio et al. and Ahrens (US 6,533,470 B2).

Gaio et al. discloses the device previously recited. However, the reference does not disclose that the fiber optic module is a SFP fiber optic module and the cage assembly is a SFP cage assembly.

Ahrens discloses a SFP cage assembly and a SFP fiber optic module (see col. 1, lines 26-40, 54-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a SFP fiber optic module and cage assembly in order to “establish internationally compatible sources of pluggable fiber optic transceivers in support of established standards for fiber optic systems” (see col. 1, lines 33-35), thereby improving the compatibility of the device to other optical systems.

4. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaio et al. in view of Gilliland et al. (US 5,966,487).

Gaio et al. discloses the device previously recited. However, the reference does not disclose a housing to couple to the nose receptacle and cover the printed circuit board, wherein the housing is shielded to protect the printed circuit board for electromagnetic interference.

Gilliland et al. discloses a housing to couple to a nose receptacle and cover the printed circuit board, wherein the housing is shielded to protect the printed circuit board from electromagnetic interference (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a housing to couple to the nose receptacle and cover the printed circuit board, wherein the housing is shielded to protect the printed circuit board for electromagnetic interference in order to prevent EMI “from entering the module and interfering with the sensitive components housed there” (see col. 4, lines 59-62).

5. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaio et al. in view of Medina (US 6,556,445 B2).

Gaio et al. discloses the device previously recited. However, the reference does not disclose that the second-actuator slides to release the fiber optic module from the cage assembly, wherein the second actuator includes grooves or rails to slideably couple the actuator to the nose receptacle.

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Medina discloses an actuator that slides to release a fiber optic module from a cage assembly (see col. 3, lines 45-54), wherein the actuator includes a groove to slideably couple the actuator to the nose receptacle (see Fig. 1, ref. 40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an actuator that slides to release a fiber optic module from a cage assembly, wherein the second actuator includes grooves or rails to slideably couple the actuator to the nose receptacle since such a modification provides relative movement between the second actuator and the cage assembly and therefore enables de-latching. The actuator in Gaio et al. also provides relative movement between the second actuator and the cage assembly, thereby enabling the fiber optic module to be released from the cage assembly. Therefore, the type of relative movement does not provide an advantage over the other, since both are functional to de-latch fiber optic module from a cage assembly. Moreover, utilizing rails or grooves both provide a guide for the actuator to accurately displace the actuator. Neither one provides an advantage over the other and therefore would be functionally equivalent.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H Kim whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.

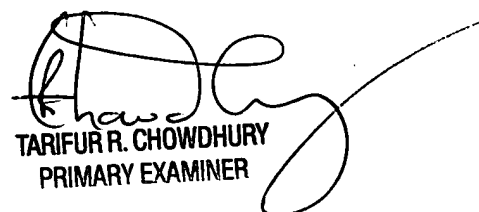
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard H Kim
Examiner
Art Unit 2871

RHK



TARIFUR R. CHOWDHURY
PRIMARY EXAMINER